

**ELECTRONIC MODULE INCLUDING A LOW TEMPERATURE CO-FIRED
CERAMIC (LTCC) SUBSTRATE WITH A CAPACITIVE STRUCTURE
EMBEDDED THEREIN AND RELATED METHODS**

Abstract of the Disclosure

A method for making an electronic module includes forming a low temperature co-fired ceramic (LTCC) substrate with at least one capacitive structure embedded
5 therein. Forming the LTCC substrate may include arranging first and second unsintered ceramic layers and the at least one capacitive structure therebetween. The at least one capacitive structure may include a pair of electrode layers, an inner dielectric layer between the pair of
10 electrode layers, and at least one outer dielectric layer adjacent at least one of the electrode layers and opposite the inner dielectric layer. The at least one outer dielectric layer preferably has a dielectric constant less than a dielectric constant of the inner dielectric layer.
15 The unsintered ceramic layers and the at least one capacitive structure may also be heated, and at least one electronic device may be mounted on the LTCC substrate and electrically connected to the at least one embedded capacitive structure.